#

# Default settings for the simulation

#

## Scenario settings

Scenario.name = default\_scenario

Scenario.simulateConnections = true

Scenario.updateInterval = 0.1

# 43200s == 12h

Scenario.endTime = 2000

## Interface-specific settings:

# type : which interface class the interface belongs to

# For different types, the sub-parameters are interface-specific

# For SimpleBroadcastInterface, the parameters are:

# transmitSpeed : transmit speed of the interface (bytes per second)

# transmitRange : range of the interface (meters)

# "Bluetooth" interface for all nodes

btInterface.type = SimpleBroadcastInterface

# Transmit speed of 2 Mbps = 250kBps

btInterface.transmitSpeed = 250k

btInterface.transmitRange = 10

# High speed, long range, interface for group 4

highspeedInterface.type = SimpleBroadcastInterface

highspeedInterface.transmitSpeed = 10M

highspeedInterface.transmitRange = 1000

# Define 11 different node groups

Scenario.nrofHostGroups = 11

## Group-specific settings:

# groupID : Group's identifier. Used as the prefix of host names

# nrofHosts: number of hosts in the group

# movementModel: movement model of thde hosts (valid class name from movement package)

# waitTime: minimum and maximum wait times (seconds) after reaching destination

# speed: minimum and maximum speeds (m/s) when moving on a path

# bufferSize: size of the message buffer (bytes)

# router: router used to route messages (valid class name from routing package)

# activeTimes: Time intervals when the nodes in the group are active (start1, end1, start2, end2, ...)

# msgTtl : TTL (minutes) of the messages created by this host group, default=infinite

## Group and movement model specific settings

# pois: Points Of Interest indexes and probabilities (poiIndex1, poiProb1, poiIndex2, poiProb2, ... )

# for ShortestPathMapBasedMovement

# okMaps : which map nodes are OK for the group (map file indexes), default=all

# for all MapBasedMovent models

# routeFile: route's file path - for MapRouteMovement

# routeType: route's type - for MapRouteMovement

# Common settings for all groups

Group.movementModel = ShortestPathMapBasedMovement

#Group.movementModel = StationaryMovement

Group.router = EpidemicRouter

Group.bufferSize = 5M

Group.waitTime = 0, 120

# All nodes have the bluetooth interface

Group.nrofInterfaces = 1

Group.interface1 = btInterface

# Walking speeds

Group.speed = 0.5, 1.5

# Message TTL of 300 minutes (5 hours)

Group.msgTtl = 300

Group.nrofHosts = 1

#following groups are the beacons. They have stationary movement and 0 speed

Group1.movementModel = StationaryMovement

Group1.groupID = bcon\_A

Group1.bufferSizer = 1G

Group1.speed = 0,0

Group1.nodeLocation = 1483,961

############################################################################

Group2.movementModel = StationaryMovement

Group2.groupID = bcon\_B

Group2.bufferSizer = 1G

Group2.speed = 0,0

Group2.nodeLocation = 1677,783

############################################################################

Group3.movementModel = StationaryMovement

Group3.groupID = bcon\_C

Group3.bufferSizer = 1G

Group3.speed = 0,0

Group3.nodeLocation = 1853,789

############################################################################

Group4.movementModel = StationaryMovement

Group4.groupID = bcon\_D

Group4.bufferSizer = 1G

Group4.speed = 0,0

Group4.nodeLocation = 1970,1180

############################################################################

Group5.movementModel = StationaryMovement

Group5.groupID = bcon\_E

Group5.bufferSizer = 1G

Group5.speed = 0,0

Group5.nodeLocation = 2147,506

############################################################################

Group6.movementModel = StationaryMovement

Group6.groupID = bcon\_F

Group6.bufferSizer = 1G

Group6.speed = 0,0

Group6.nodeLocation = 2020,1374

############################################################################

Group7.movementModel = StationaryMovement

Group7.groupID = bcon\_G

Group7.bufferSizer = 1G

Group7.speed = 0,0

Group7.nodeLocation = 2313,1168

############################################################################

Group8.movementModel = StationaryMovement

Group8.groupID = bcon\_H

Group8.bufferSizer = 1G

Group8.speed = 0,0

Group8.nodeLocation = 2387,1412

############################################################################

Group9.movementModel = StationaryMovement

Group9.groupID = bcon\_I

Group9.bufferSizer = 1G

Group9.speed = 0,0

Group9.nodeLocation = 2717,737

############################################################################

Group10.movementModel = StationaryMovement

Group10.groupID = bcon\_G

Group10.bufferSizer = 1G

Group10.speed = 0,0

Group10.nodeLocation = 2848,830

# group11 specific settings

Group11.groupID = c

# cars can drive only on roads

Group11.okMaps = 1

# 10-50 km/h

Group11.speed = 2.7, 13.9

Group11.nrofHosts = 200

#este GroupX.nrofHosts especifica o numero de objectos que um group irá ter, caso não seja definido, um grupo terá o nº default em Group.nrofHosts

## Message creation parameters

# How many event generators

Events.nrof = 1

# Class of the first event generator

Events1.class = MessageEventGenerator

# (following settings are specific for the MessageEventGenerator class)

# Creation interval in seconds (one new message every 600 to 601 seconds)

Events1.interval = 600,601

# Message sizes (500kB - 1MB)

Events1.size = 1k,1k

# range of message source/destination addresses

#os primeiros 10 nodes vao mandar mensagens

Events1.hosts = 0,9

#todos os nodes poderão ser alvos de mensagens

Events1.tohosts = 0,209

# Message ID prefix

Events1.prefix = M

## Movement model settings

# seed for movement models' pseudo random number generator (default = 0)

MovementModel.rngSeed = 1

# World's size for Movement Models without implicit size (width, height; meters)

MovementModel.worldSize = 4500, 3400

# How long time to move hosts in the world before real simulation

MovementModel.warmup = 1000

## Map based movement -movement model specific settings

MapBasedMovement.nrofMapFiles = 1

MapBasedMovement.mapFile1 = data/dortmund.wkt

## Reports - all report names have to be valid report classes

# how many reports to load

Report.nrofReports = 7

# length of the warm up period (simulated seconds)

Report.warmup = 0

# default directory of reports (can be overridden per Report with output setting)

Report.reportDir = reports/

# Report classes to load

Report.report1 = MessageStatsReport

Report.report2 = MessageDeliveryReport

Report.report3 = CreatedMessagesReport

Report.report4 = DistanceDelayReport

Report.report5 = MessageLocationReport

MessageLocationReport.granularity = 1

MessageLocationReport.messages = 1

Report.report6 = MessageDelayReport

Report.report7 = MessageReport

## Default settings for some routers settings

ProphetRouter.secondsInTimeUnit = 30

SprayAndWaitRouter.nrofCopies = 6

SprayAndWaitRouter.binaryMode = true

## Optimization settings -- these affect the speed of the simulation

## see World class for details.

Optimization.cellSizeMult = 5

Optimization.randomizeUpdateOrder = true

## GUI settings

# GUI underlay image settings

GUI.UnderlayImage.fileName = data/helsinki\_underlay.png

# Image offset in pixels (x, y)

GUI.UnderlayImage.offset = 64, 20

# Scaling factor for the image

GUI.UnderlayImage.scale = 4.75

# Image rotation (radians)

GUI.UnderlayImage.rotate = -0.015

# how many events to show in the log panel (default = 30)

GUI.EventLogPanel.nrofEvents = 100

# Regular Expression log filter (see Pattern-class from the Java API for RE-matching details)

#GUI.EventLogPanel.REfilter = .\*p[1-9]<->p[1-9]$